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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/511,247      | 10/13/2004  | Laimute R Svarcas    | 3166-01             | 8880             |

7590 01/24/2008  
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| EXAMINER |
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VASISTH, VISHAL V

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| ART UNIT | PAPER NUMBER |
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4151

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01/24/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                                      |                                       |  |
|------------------------------|--------------------------------------|---------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/511,247 | <b>Applicant(s)</b><br>SVARCAS ET AL. |  |
|                              | <b>Examiner</b><br>VISHAL VASISTH    | <b>Art Unit</b><br>4151               |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 October 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>05/16/2005</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Blythe International Publication No. WO 93/03120 (hereinafter referred to as WO '120).

Regarding claim 1, WO '120 discloses a lubricant for a two-stroke internal combustion engine comprising 40% 100 neutral mineral oil (at least 40% by weight of an oil of lubricating viscosity) (P. 36/L. 17-18), from about 2 to about 15% by weight of the product of a isostearic acid and tetraethylenepentamine (about 0.5 to about 8 percent by weight of at least one condensation product of a fatty hydrocarbyl monocarboxylic acid acylating agent with an amine or ammonia) (P. 40/Example B-2 and P.50/L. 27-30), from about 0.5 to about 30% by weight of a Mannich dispersant (P. 28/L. 15 and P. 50/L. 20-26 and P. 54/Table 1) a fluidizing oil having a viscosity greater than 10 centipoise at 100°C (0 to about 45 percent by weight of a combustible solvent having a viscosity of less than  $2 \text{ mm}^2\text{s}^{-1}$  (cSt) at 100°C, an oxidizing-inhibiting agent which is an optional additive to the composition since it can be present at 0%. The reference does teach the possible use of an oxidizing-inhibiting agent but not at a particular weight percentage within the composition (0 to about 3 percent by weight of an antioxidant) (P.51/L. 13), and the amounts of the dispersants are equal to at least

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7.5% by weight (2% + 0.5% + 5% [see below] = 7.5% by weight) which is (at least 1.5% by weight). Also, the total weight of nitrogen in the lubricant composition is 0.5% (nitrogen content in the lubricant composition is about 0.25 to about 0.75 percent by weight) (P. 37/L. 11-12).

Regarding claim 2, WO '120 discloses a lubricant composition comprising from about 5 to about 30% of an alkyl amino phenol dispersant (about 0.5 to about 8 percent by weight of at least one additional dispersant not claimed in claim 1) (P. 6/L. 5-17 and P. 50/L. 20-26).

Regarding claim 3, WO '120 discloses a lubricant composition comprising a dispersant which is an alkyl amino phenol (additional dispersant is an alkyl amino phenol) (P. 6/L. 5-17).

Regarding claim 4, WO '120 discloses a lubricant composition comprising a fatty carboxylic acid containing about 8 to about 30 carbon atoms with a polyamine (the condensation product contains a fatty acid having about 12 to about 24 carbon atoms with a polyamine) (P. 38/L. 4-8 and P. 40/Example B-2).

Regarding claim 5, WO '120 discloses a lubricant composition comprising an isostearic acid and tetraethylenepentamine (fatty acid comprises isostearic acid and the polyamine comprises tetraethylenepentamine) (P. 40/Example B-2).

Regarding claim 6, WO '120 discloses a lubricant composition comprising a Mannich dispersant which is the reaction product of polybutene-substituted phenol, formaldehyde and an aqueous dimethylamine solution (Mannich dispersant is the

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reaction product of a polybutene-substituted phenol, formaldehyde, and dimethylamine) (P. 36 -37/Example A-12 - A-14).

Regarding claim 7, WO '120 discloses a lubricant composition comprising a major amount of an oil of lubricating viscosity (admixed with a major amount of liquid fuel composition) (P. 2/L. 25-29).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blythe International Publication No. WO 93/03120 (hereinafter referred to as WO '120).

Regarding claim 8, WO '120 discloses a method of introducing into a two-cycle internal combustion engine a fuel-lubricant mixture comprising 40% 100 neutral mineral oil, about 2-15% by weight of a product of isostearic acid and tetraethylenpentamine, about 0.5 to about 30% by weight of a Mannich dispersant, 15-70% of a fluidizing oil,

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and an oxidizing-inhibiting agent (method of lubricating a direct fuel injection two-cycle engine, comprising supplying the lubricant composition of claim 1 to the engine) (P. 2/L. 25-30). The reference, WO '120, does not specifically indicate "lubricating a **direct** fuel injection two-cycle engine," however, it would be obvious to use the lubricant composition of claim 1 in any two-cycle engine including direct fuel injection two-cycle engines with a reasonable expectation of success.

Regarding claim 9, WO '120 discloses all of the limitations of claim 8 and further discloses a lubricant composition comprising a major amount of an oil of lubricating viscosity which is supplied to a two-stroke engine (admixed with a major amount of liquid fuel composition) (P. 2/L. 25-30).

### **Conclusion**

In the International search report there were several references that are pertinent to the applicant's disclosure but they were not used in the rejection because the WO '120 reference was sufficient for a 102(b) rejection.

The prior art made of record and not relied upon is considered pertinent to the applicant's disclosure: Ilmain et al., US Patent No. 6,391,833 and Chamberlin et al., US Patent No. 6,242,394.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VISHAL VASISTH whose telephone number is (571)270-3716. The examiner can normally be reached on M-F 8:30a-5:30p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mikhail Kornakov can be reached on (571)272-1303. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

VVV

/Michael Kornakov/  
Supervisory Patent Examiner, Art Unit 4151